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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,369	07/18/2003	Jang Geun Oh	HI-0159	4055
34610	7590	01/24/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			SHERMAN, STEPHEN G	
			ART UNIT	PAPER NUMBER
			2674	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/621,369	OH, JANG GEUN	
	Examiner	Art Unit	
	Stephen G. Sherman	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>✓ 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>✓ 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date <u>12/27/05</u></p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other: _____</p> |
|---|---|

DETAILED ACTION

1. This office action is in response to the amendment filed the 6 January 2006.

Claims 1-8 and 10-42 are pending. Claim 9 is cancelled.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Mendelson et al. (US 6,559,826).

Regarding claim 1, Mendelson et al. disclose an apparatus for setting brightness control codes used to control a brightness of a display screen (Figure 6), comprising:

a sensor (Figure 6, item 610) configured to measure a brightness of a display screen and to output a brightness signal (Column 9, lines 28-42. The examiner interprets that the sensor 610 transmitting data directly to the LCD monitor 216 would be outputting a brightness signal.);

a controller (Figure 6, item 590) configured to receive the brightness signal and to output brightness control codes based on the brightness signal (Column 9, lines 28-48 and column 11, lines 1-17. The examiner interprets that since the sensor 610 sends the data to the monitor 216 and that MCU 593 contained within controller 590 communicates the measurement data, that the controller receives the brightness signal from the sensor and outputs brightness control codes based on this data from the sensor 610.),

wherein the brightness control codes can be used to selectively adjust a brightness of the display screen (Column 9, lines 43-48. The examiner interprets that since the appropriate control signals are sent based on the measurement data from the sensor that the control codes adjust the brightness of the display screen.),

the brightness control codes structured in an EDID format (Column 9, line 66 to column 10, line 13).

Regarding claim 2, Mendelson et al. disclose the apparatus according to claim 1,

wherein the controller is also configured to control a brightness of the display screen such that the display screen can be adjusted to a predetermined brightness level (Column 10, lines 56-67. The examiner interprets that the table contains a predetermined brightness level.), and

wherein the controller uses the brightness signal from the sensor to set a brightness control code that corresponds to the predetermined brightness level (Figure 9 and column 12, line 59 to column 13, line 52. The examiner interprets that since the measurements are made at step 930 and that they are stored at step 960, that the signal from the sensor sets the control codes corresponding to the predetermined level.).

Regarding claim 3, Mendelson et al. disclose the apparatus of claim 2,

wherein the controller is also configured to control the display screen such that the display screen can be adjusted to a plurality of different predetermined brightness levels, and wherein the controller uses brightness signals output from the sensor at each of the plurality of different predetermined brightness levels to set a plurality of different brightness control codes that correspond to each of the plurality of different predetermined brightness levels (Column 11, lines 11-17 and Figure 9. The examiner interprets that since in step 935 ratios are determined at various levels that a plurality of different codes are set at a plurality of levels.).

Regarding claim 4, Mendelson et al. disclose the apparatus of claim 1.

wherein the controller is configured to record the brightness control codes in a memory of a computer system (Column 9, lines 43-47 and column 4, lines 59-67 and Figure 1, items 13,14 and 15. The examiner interprets that since the codes are sent to the computer system and that the computer system has memory that the codes would be stored there.).

Regarding claim 5, Mendelson et al. disclose the apparatus according to claim 1,

wherein the controller is configured to record the brightness control codes in a memory of the display screen (Figure 6, item 595).

Regarding claim 6, Mendelson et al. disclose the apparatus according to claim 1,

wherein the controller is configured to output the brightness control codes to at least one of a system BIOS of a computer, an operating system of a computer, and a microcontroller of a computer system (Column 9, lines 43-47 and column 4, lines 59-67 and Figure 1, items 12 and 19. The examiner interprets that since the codes are sent to the computer system and that the computer system has an operating system and processors 12 and 19 that the codes are output to at least one of these items in the computer system.)

Regarding claim 7, Mendelson et al. disclose the apparatus according to claim 1,

wherein the sensor comprises at least one photodiode (Figure 6, item 610 shows a light sensor. It would be inherent that the light sensor would be a photodiode since a photodiode is commonly used to sense light.).

Regarding claim 8, Mendelson et al. disclose the apparatus according to claim 1,

wherein the sensor comprises a jig configured to be temporarily attached to the display screen (Figure 10A and 10B, item 1048 holds the sensor so that it is able to be temporarily attached to the display screen.).

Regarding claim 10, Mendelson et al. disclose the apparatus according to claim 1,

wherein the brightness control codes comprise information used to control a power inverter of a liquid crystal display (Figure 6, item 570 and column 9, lines 28-42).

Regarding claim 11, Mendelson et al. disclose the apparatus of claim 1,

wherein the brightness control codes includes high temperature brightness control codes that indicate how to control the brightness of the display screen when the display screen is operated at high temperatures (Column 10, lines 56-67).

Regarding claim 12, Mendelson et al. disclose a display screen for a computer system (Figure 2), comprising:

a display portion of the computer system for displaying an image (Figure 2, item 210); and

a memory of computer system configured to store a plurality of brightness control codes that can be used by the controller of a computer system to set the display screen to a corresponding plurality of predetermined brightness levels (Figure 6, item 595 and column 9, line 66 to column 10, line 13. The examiner interprets that the display is part of the computer system, therefore the memory 595 is a memory of the computer system.).

Regarding claim 13, Mendelson et al. disclose the display screen according to claim 12,

wherein the memory is configured to store the brightness control codes in an EDID format (Column 9, line 66 to column 10, line 13).

Regarding claim 14, Mendelson et al. disclose the display screen according to claim 12,

wherein the memory is configured to store inverter control codes that can be used to control an inverter that supplies power to the display screen (Column 9, lines 28-42 and column 10, lines 56-67).

Regarding claim 15, Mendelson et al. disclose a computer system, comprising:
a display screen of the computer system (Figure 2, item 210);
a sensor of the computer system configured to sense a brightness of the display screen and to output a brightness signal (Figure 6, item 610); and
a controller of the computer system coupled to the display screen and the sensor and configured to control a brightness of the display screen based on the brightness signal output by the sensor (Figure 6, item 590 is coupled to the display screen and the sensor 610. Column 9, lines 28-48 and column 11, lines 1-17. The examiner interprets that since the sensor 610 sends the data to the monitor 216 and that MCU 593 contained within controller 590 communicates the measurement data, that the controller receives the brightness signal from the sensor and outputs brightness control codes based on this data from the sensor 610.).

Regarding claim 16, this claim is rejected under the same rationale as claim 7.

Regarding claim 17, Mendelson et al. discloses the computer system according to claim 15,

further comprising an inverter(Figure 6, item 570), coupled to the display screen and the controller and configured to provide power to the display screen, wherein the controller controls the inverter to adjust the brightness of the display screen (Column 9, lines 28-42).

Regarding claim 18, Mendelson et al. disclose the computer system of claim 15, wherein the controller is configured to generate brightness control codes based on the brightness signal of the sensor, and wherein the brightness control codes can be used to selectively adjust a brightness of the display screen (Column 9, lines 28-48 and column 11, lines 1-17. The examiner interprets that since the sensor 610 sends the data to the monitor 216 and that MCU 593 contained within controller 590 communicates the measurement data, that the controller generates brightness control codes based on this data from the sensor 610 and that since the appropriate control signals are sent based on the measurement data from the sensor that the control codes adjust the brightness of the display screen.).

Regarding claim 19, this claim is rejected under the same rationale as claim 6.

Regarding claim 20, this claim is rejected under the same rationale as claim 13.

Regarding claim 21, this claim is rejected under the same rationale as claim 11.

Regarding claim 22, Mendelson et al. disclose the computer system according to claim 15,

wherein the sensor is installed at a center or one side of the display screen (Figures 10A and 10B).

Regarding claim 23, Mendelson et al. disclose a method for controlling a brightness level of a display in a computer system, the method comprising:

reading brightness control codes from a memory of the display in the computer system (Column 11, lines 1-17); and

controlling a brightness of the display using the brightness control codes (Column 10, lines 56-67).

Regarding claim 24, Mendelson et al. disclose the method according to claim 23,

wherein the reading comprises reading a plurality of brightness control codes from the memory of the display, wherein each of the brightness control codes corresponds to a different predetermined brightness level, and wherein the controlling comprises using the brightness control code corresponding to a desired brightness level to control the brightness of the display (Column 10, lines 56-67. The examiner interprets that since the table contains the brightness codes that these codes would be the ones used to control the brightness of the display.).

Regarding claim 25, this claim is rejected under the same rationale as claim 13.

Regarding claim 26, this claim is rejected under the same rationale as claim 11.

Regarding claim 27, this claim is rejected under the same rationale as claim 14.

Regarding claim 28, Mendelson et al. disclose a method of setting brightness control codes for a display (Figure 9), comprising:

driving the display (Figure 9, step 910. The examiner interprets that to arm up the display it must be driven.);

sensing a brightness of the display (Figure 9, steps 920 and 930 and column 12, line 37 to column 13, line 8);

adjusting the driving of the display until the display is driven at a predetermined brightness level (Figure 9, steps 920 and 930 and column 12, line 37 to column 13, line 8. The examiner interprets that since the intensity levels are changed and that the measurements are taken as the intensities are displayed on the screen, that the driving is adjusted to display the intensity at a predetermined level.); and

setting a brightness control code corresponding to the predetermined brightness level (Figure 9, steps 940, 950 and 960. The examiner interprets that converting and storing the measurements would be setting a brightness control code.).

Regarding claim 29, Mendelson et al. disclose the method according to claim 28,

wherein the driving comprises initially driving the display screen using a brightness control code provided by the display manufacturer, and wherein the setting

step comprises setting a new brightness control code that replaces the brightness control code provided by the display manufacturer (Column 10, lines 56-67).

Regarding claim 30, Mendelson et al. disclose the method according to claim 28,

wherein the driving, sensing adjusting and setting are preformed a plurality of times to set a plurality of different brightness control codes corresponding to a plurality of different predetermined brightness levels (Figure 9, step 935 states levelss which refers to a plurality.).

Regarding claim 31, Mendelson et al. disclose the method according to claim 30,

further comprising storing the plurality of brightness control codes in a memory of the display (Figure 9, step 960).

Regarding claim 32, this claim is rejected under the same rationale as claim 6.

Regarding claim 33, this claim is rejected under the same rationale as claim 14.

Regarding claim 34, this claim is rejected under the same rationale as claim 11.

Regarding claim 35, this claim is rejected under the same rationale as claim 14.

Regarding claim 36, please refer to the rejections of claim 28 and 30.

Mendelson et al. also disclose

using one of the brightness control codes corresponding to a desired brightness level to drive the display at the desired brightness level (Column 10, lines 56-67. The examiner interprets that after the codes are set that the display would be driven using one of the brightness control codes stored.).

Regarding claim 37, this claim is rejected under the same rationale as claim 14.

Regarding claim 38, Mendelson et al. disclose the method according to claim 36,

wherein the bright control code is set after the display is driven at the predetermined brightness level (Figure 9. The examiner interprets that the code is set in steps 940-960 after the display is driven in steps 910 and 920.).

Regarding claim 39, this claim is rejected under the same rationale as claim 13.

Regarding claim 40, this claim is rejected under the same rationale as claim 13.

Regarding claim 41, this claim is rejected under the same rationale as claim 38.

Regarding claim 42, this claim is rejected under the same rationale as claim 38.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kawashima et al. (US 6,188,380) discloses of setting luminance values of a liquid crystal panel.

Evanicky et al. (US 6,611,249) discloses a system and method for controlling and setting the luminance of a liquid crystal display panel.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2674

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS

11 January 2006



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER